

Chapter 7

Conceptual framework- Measurement of items

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CREATING GREAT OUTCOMES

through professional qualification training
and study abroad services and preparation

Main contents

- ◆ Historical cost accounting
- ◆ Current value accounting 现值会计
 - Constant purchasing power 统一购买力
 - Current cost accounting 现行成本会计
- ◆ Financial and physical capital maintenance
财务资本保全与实物资本保全

◆ Historical cost 历史成本法

Historical cost = cost – written off amounts (e.g., depreciation)

➤ Advantage

impairments 减值

I. Easy to understand

II. Objective, free from biases 成本就是购买价格，证据充分

➤ Disadvantages

I. They contain mixed values, some items are at current values, some at out-of-date values 资产价值非常混杂，因为同一个资产的价值、很多产品的价值有购买时间因素

II. Inventories reflect prices at the **date of purchase** rather than those current at year end

III. When prices rises, ROCE would be affected for overstatement of profits and understatement of assets. Moreover, gearing is overstated.

*PPE 60 → 80
Cost model
depreciation ~ expense ↓
Asset ↓
profit ↑
Equity / (RR) ↓*

*OCI (RR) T20
Revaluation
↑
↓
↑*

*Asset ↓ ↑
ROCE ↑ ↓
Gearing D/E ↑ ↓*

where $ROCE = \frac{PBIT}{Equity + AVCL}$

➤ Other asset values

✓ Replacement cost

- I. In a non-current asset situation, we need to calculate the **net** replacement cost. $\text{Net replacement cost} = \text{replacement cost} - \text{appropriate amount of depreciation}$.
- II. If inventory is to be replaced, just to find the replacement cost.

✓ Net realizable value

Fair value less cost to sell

✓ Economic value

Value in use (present value of future cash flow)

✓ Current cost

Current **selling price** of that asset adjusted by **the age of the asset**

Drexler acquired an item of plant on 1 October 20X2 at a cost of \$500,000. It is being depreciated over five years, using straight-line depreciation and an estimated residual value of 10% of its historical cost or current cost as appropriate. As at 30 September 20X4, the manufacturer of the plant still makes the same item of plant and its current price is \$600,000.

What is the correct carrying amount to be shown in the statement of financial position of Drexler as at 30 September 20X4 under historical cost and current cost?

	Historical cost \$	Current cost \$	
A	320,000	600,000	$500 - \frac{500 \times 9\%}{5} \times 2$ $= 500 - 180$ $= 320$
B	320,000	384,000	
C	300,000	600,000	$600 - \frac{600 \times 9\%}{5} \times 2 = 384$
D	300,000	384,000	

Historical cost

annual depreciation = \$90,000 $((500,000 \times 90\%)/5 \text{ years})$.

After two years carrying amount would be \$320,000 $(500,000 - (2 \times 90,000))$.

Current cost

annual depreciation = \$108,000 $((600,000 \times 90\%)/5 \text{ years})$.

After two years carrying amount would be \$384,000 $(600,000 - (2 \times 108,000))$.

Choose B

◆ **Current value accounting 现值会计** **(alternative to historical cost accounting)**

Two forms:

- **Constant purchasing power accounting (CPP) 统一购买力会计**
- **Current cost accounting 现行成本会计 (CCA)**

➤ Constant purchasing power accounting (CPP)

Key features: 全都调到一个购买力水平上

- I. Accounts figures are adjusted to show all figures in terms of money **with the same purchasing power.**
- II. Figures in P/L and SOFP are adjusted by the CPP factor.

CPP factor=**general price index** at the reporting date/**general price index** at date of entry in accounts
分母是入账时的价格指数

➤ **Current cost accounting**

✓ **Advantages of CCA**

- I. More relevant to users;
- II. Assets are stated at their value to the business.

✓ **Disadvantages**

- I. Complex and lack of familiarity
- II. Greater subjectivity and lower reliability.
- III. CCA only adjust values for non-monetary assets
- IV. The market value is difficult to obtain.
- V. There may be no intention to replace an asset.

◆ Capital maintenance 资本保全

➤ Objective

tries to ensure that excessive dividends are not paid in times of changing prices. 过度支付股利

➤ Classification

✓ Physical capital maintenance (PCM) 实务资本保全

Adjusting opening capital by **Specific price change**. 特定物价指数

✓ Financial capital maintenance (FCM) 金融资本保全

Adjusting opening capital by **inflation rate**.

一般通货膨胀率

都是调整期初的资本金，但是调整指数不同

✓ Physical capital maintenance

Business starts on 2011.1.1 with contribution of \$1000 from owners. This is used to purchase 100 units at \$10 each, which are sold for \$1,100 cash. Opening capital is \$1,000 and closing is \$1,100 so profit is usually measured as \$100.

However, over the year, the price of the units has increased by 7.5%, to \$10.75 (a specific price change hitting the business), Therefore update opening capital $(1+7.5\%)*1000=1,075$.

Profit is $\$1,100-1,075=\25

Even if the profit is paid out, the business is left with cash of \$1075. this is enough to buy 1000 more units at \$10.75 each. In other words, the productive capacity of the business has been maintained.

However, if the price rises were 15% (\$11.5), then opening capital = $115\% \times 1000 = \$1,150$, so the profit of the business is $\$1,100 - \$1,150 = 50$ loss.

Business has cash of \$1,100 as there are no profits to pay out - can only purchase 95 units at \$11.5, i.e., productive capacity has deteriorated.

✓ Financial capital maintenance

Business starts on 2011.1.1 with contribution of \$1000 from owners. This is used to purchase 100 units at \$10 each, which are sold for \$1,100 cash. Opening capital is \$1,000 and closing is \$1,100 so profit is usually measured as \$100.

inflation over time makes comparisons difficult so constant purchasing power adjusts for general indices of inflation.

If the increase in RPI is 5%, update opening capital

一般物价指数
 $(1+5\%)*1000=1050$, so profit is only $\$1,100-1,050=\50 .

Exercise

Exam kit

T54,T58,T63-65